

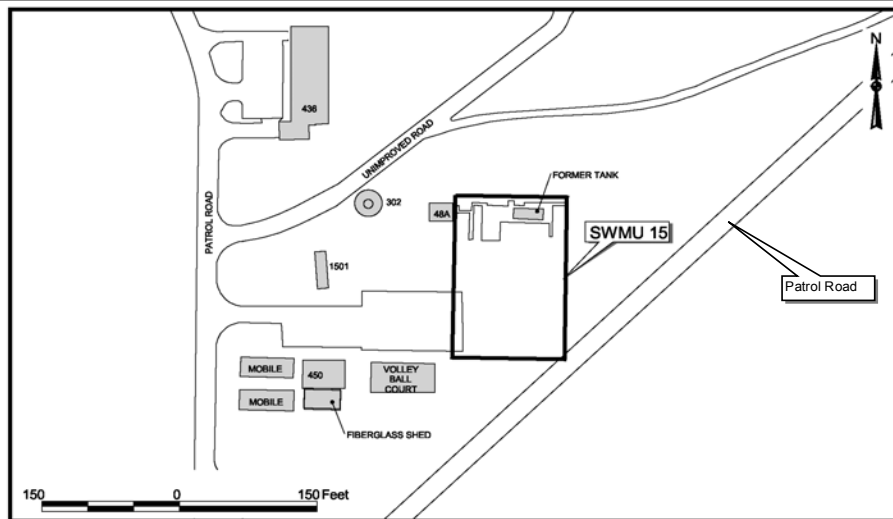
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STATEMENT OF BASIS FOR SOLID WASTE MANAGEMENT UNIT 15 OLD PESTICIDE
HANDLING AREA NS MAYPORT FL
9/4/2002
NAVAL STATION MAYPORT

STATEMENT OF BASIS

SWMU 15 – Old Pesticide Handling Area

Naval Station Mayport Mayport, Florida



SUMMARY

The proposed corrective measure for Solid Waste Management Unit (SWMU) 15 at the Naval Station (NAVSTA) Mayport is capping, Land Use Controls (LUCs), and site monitoring for soil and Monitored Natural Attenuation (MNA), LUCs, and site monitoring for groundwater. SWMU 15 has been impacted by low concentrations of pesticides and arsenic in soil and groundwater. LUCs will be implemented to prevent the site from being used for residential purposes, thus controlling the exposure pathways to the soil and groundwater. MNA will be used to track the progress of contaminant degradation in groundwater. In addition, an asphalt cover will be added to surface soil areas where the concentrations of contaminants exceed the Florida Department of Environmental Protection's (FDEP's) soil Cleanup Target Levels for future industrial use and to prevent contaminant leaching to groundwater. This cap will also prevent exposure to ecological receptors.

The public is invited to comment on this proposed remedy or any other corrective measure alternatives including those not previously studied. Information on how the public may participate in this decision-making process is provided in the Public Participation section of this document.

INTRODUCTION

Pursuant to the Resource Conservation and Recovery Act (RCRA), as amended by the 1984 Hazardous and Solid Waste Amendments (HSWA), the U.S. Environmental Protection Agency (EPA) issued a HSWA permit to NAVSTA Mayport, effective June 15, 1993, to address corrective action at the facility and required NAVSTA Mayport to conduct a RCRA Facility Investigation (RFI) to

determine the nature and extent of contamination at SWMU 15. At that time EPA served as the lead regulatory agency for corrective action oversight. In November of 2000, HSWA authority was delegated to the State of Florida. The FDEP will become the lead regulatory agency when a State HSWA permit is issued to NAVSTA Mayport. During the transition, EPA will continue to provide limited oversight and the FDEP will perform the technical reviews of documents submitted under the HSWA permit and will provide its comments and recommendations to EPA for forwarding to the Navy.

This Statement of Basis identifies the proposed corrective measure for SWMU 15 and explains the related rationale; describes all alternatives evaluated as part of the Corrective Measures Study (CMS); solicits public review and comment on all alternatives, including those not previously studied; and provides information as to how the public can be involved in the remedy selection process. Additional details regarding the facility, the investigation conducted under the RFI, and the evaluation of the corrective measure alternatives may be found in the RFI and CMS Reports. These documents are kept as part of the administrative record at the information repository. Refer to the Public Participation section of this document for their location. A glossary, which defines some of the technical terms contained herein, is included at the end of this document.

The corrective measures reflected in this Statement of Basis are those proposed by the Navy, EPA, and FDEP for implementation at SWMU 15. Changes to the proposed corrective measure, or a change from the proposed corrective measure to another alternative, may be made if public comments or additional data indicate

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NAVSTA Mayport, Florida

that such a change would result in a more appropriate solution.

PUBLIC PARTICIPATION

To make a final decision and incorporate a corrective measure into the HSWA permit, the FDEP is soliciting public review and comment on this Statement of Basis for the proposed corrective measure for SWMU 15 at NAVSTA Mayport. The regulations under 40 *Code of Federal Regulations* (CFR) 124.10(6) require a 45-day comment period for a permit modification request made by the permittee under RCRA. The FDEP has undertaken the lead role on this request initiated by the Navy (the permittee). The comment period will begin on Sunday, September 8, 2002, which is the date of publication of the public notice in the *Florida Times Union* newspaper, and will end on Wednesday, October 23, 2002.

Copies of the RFI and CMS Reports and the Statement of Basis will be available for public review at the information repository located at the Jacksonville Public Library - Beaches Branch, 600 3rd Street, Neptune Beach, FL, 32266 [Phone (904) 241-1141].

A public hearing will be held if one is requested. To request information about a public meeting or about the comment period, to obtain more information about this Statement of Basis, or to submit written comments, please contact: James Cason, FDEP, Twin Towers Office Building, Technical Review Section, 2600 Blair Stone Road, Tallahassee, FL, 32399-2400 [Phone (850) 921-4230 or Fax (850) 922-4939].

All comments must be postmarked no later than Wednesday, October 23, 2002.

Next Steps

Following the 45-day public comment period, the FDEP will issue a final decision on the RCRA permit modification request. The RCRA permit modification will detail the corrective measure chosen for SWMU 15 and will include responses to comments received during the public comment period in a Response to Comments. Upon receipt of a group of Statement-of-Basis documents for NAVSTA Mayport SWMUs, the FDEP will develop and issue the draft RCRA permit modification including SWMU 15.

When a final decision to modify the permit has been made, notice will be given to the Navy and to each person who has submitted written comments or who has requested notice of the final decision. The final permit decision shall become effective 30 days after the issuance of the notice of the decision unless a later date is specified or review is requested under 40 CFR 124.19. If no comments are received requesting a change in the draft permit, the final permit modification shall become effective immediately upon issuance.

Contact Persons

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PROPOSED REMEDIES

The proposed corrective measure for soil includes providing an asphalt cover/cap over the contaminated surface soil areas to limit exposure, imposing LUCs in the form of a cap/soil disturbance prohibition, and site monitoring to ensure that the LUCs are in place. The estimated capital cost for the proposed soil corrective measure is \$254,000 with an annual operation and maintenance cost of \$4,000 and an additional \$7,000 every fifth year for 5-year reviews. The present worth cost, over a period of 30 years, is \$316,000.

The proposed corrective measure for groundwater includes MNA, LUCs, and site monitoring. The LUCs would prohibit the use of the groundwater for drinking water and restrict future development of the site until MNA or any future active corrective measure allows for unrestricted use. The estimated capital cost for the proposed groundwater corrective measure is \$22,500, with an annual operation and maintenance cost of \$38,000 and an additional \$7,000 every fifth year for 5-year reviews. The present worth cost, over a period of 30 years, is \$397,000.

To implement the LUCs, a Land Use Controls Implementation Plan (LUCIP) would be developed by the Navy for this site. The LUCIP would be approved by the FDEP/EPA and will serve as the Corrective Measures Implementation Plan as required to implement a corrective measure, pursuant to the requirements of RCRA.

FACILITY BACKGROUND

NAVSTA Mayport is located near the town of Mayport within the city limits of Jacksonville, Florida, in northeastern Duval County on the south shore of the confluence of the St. Johns River and the Atlantic Ocean (Figure 1). SWMU 15 is located in the northwestern part of NAVSTA Mayport (Figure 2). It is approximately 350 feet east of the western boundary of the installation and approximately 700 feet west of Runway 23/5. Presently, the area is covered with gravel and is used for parking.

Figure 1. Naval Station Mayport Location Map

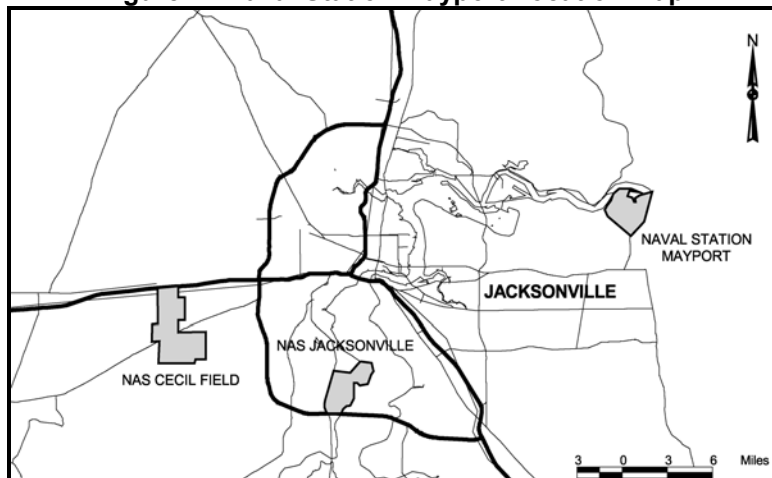
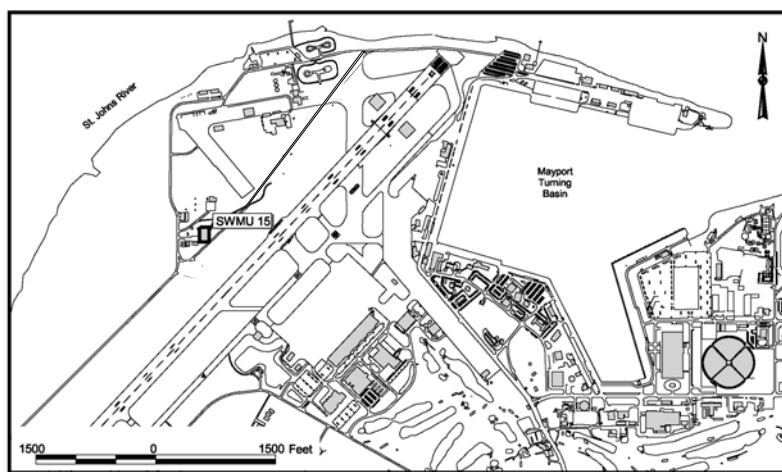


Figure 2. SWMU 15 Location Map



Pesticides and the application equipment were stored in a shed at SWMU 15 during 1963 and 1964. Pesticides were mixed at the site and, after use, the application equipment may have been washed near Building 48A. Runoff from washing and rinsing activities might have infiltrated into the ground. Small quantities of pesticides may have been disposed of near Building 48A. No pesticides are currently handled at the site.

Several investigations and studies have been conducted at SWMU 15. From 1993 to 1995, an RFI was conducted to delineate the nature and extent of contamination. During 1995-1996 a study was performed for in situ bioaugmentation. In 1997, an interim measure was conducted to install a geotextile fabric and gravel cap over the site. In 1998, additional groundwater sampling was conducted in support of an evaluation of an innovative technology. Field activities consisted of the collection of surface and subsurface soil samples and the installation and sampling of groundwater monitoring wells.

SUMMARY OF FACILITY RISKS

A Human Health Baseline Risk Assessment and an Ecological Risk Assessment were performed as part of

the RFI report. An exceedance of a FDEP or EPA risk level indicates a potential concern for the SWMU.

Human Health Baseline Risk Assessment

Risk characterization for SWMU 15 was conducted for potential exposures to soil and groundwater under current and future land-use scenarios.

Soil. The cancer risk for site workers associated with the exposure to surface soil slightly exceeded FDEP's acceptable risk level but did not exceed EPA's acceptable risk range. The cancer risk for hypothetical future residents exceeded both FDEP's and EPA's acceptable risk levels.

Noncancer risks associated with the exposure to surface soil for current land use (adolescent trespasser, adult trespasser, and excavation worker) and for future land use (adult resident, occupational worker, and site maintenance worker) were all below both EPA's and FDEP's requirements. Only the hypothetical child resident was above EPA and FDEP requirements.

The risks associated with the exposure to subsurface soil were all below both EPA's and FDEP's acceptable risk levels.

Groundwater. The cancer risk associated with hypothetical future ingestion of groundwater exceeded both the EPA's and FDEP's target cancer risk levels. Noncancer risk associated with groundwater ingestion also exceeded both FDEP's and EPA's requirements.

RFI Assessment of Ecological Impacts

The ecological risk assessment evaluated potential pathways of exposure of ecological receptors to contamination in surface soil and groundwater.

Surface Soil. Lethal effects for terrestrial wildlife exposed to soil contamination were not indicated but possible sublethal effects (reduction of growth or reproduction) from 4,4'-DDT were identified. Possible impacts to plants from exposure to chromium, mercury, and zinc were identified because plant toxicity benchmark values were exceeded. Unacceptable risks to invertebrates were identified because mortality was observed in earthworm toxicity tests.

Groundwater. The RFI concluded that remediation of contaminants in groundwater to protect potential ecological receptors was not required.

INTERIM MEASURES

Five separate interim measures/evaluations were conducted after the completion of the RFI at SWMU 15.

1. Naval Environmental Leadership Program Technology Evaluation. A technology demonstration for in situ bioaugmentation of soil containing pesticides was conducted during 1995–1996. A proprietary microorganism mixture was applied in liquid form to soil by spraying. It was concluded that the demonstration did not adequately establish that the bioremediation method was responsible for any positive observed effects in soil at SWMU 15.

2. Interim Measures – Capping. In 1997, an interim measure to cap the SWMU was performed to prevent potential exposures of human receptors and ecological receptors to surface soil. A total surface area of approximately 215 feet x 170 feet was capped with a geotextile fabric and a gravel cover.

3. Additional Characterization of Groundwater Contamination. An innovative technology (electrokinetic technology) was planned to be evaluated 1998. An evaluation of the sample data determined that the proposed technology was inappropriate for the conditions at SWMU 15.

4. Groundwater Monitoring for Natural Attenuation. A monitoring program was put in place to evaluate natural attenuation of groundwater contaminants. Quarterly monitoring performed in May 2000 indicated the presence of alpha- and beta-BHCs at levels exceeding the groundwater cleanup target levels.

5. Land Use Controls. LUCs were implemented as an interim measure to restrict the SWMU to industrial use.

SCOPE OF THE CORRECTIVE ACTION

Contaminants in soil that exceed the soil residential cleanup target levels in Chapter 62-777 *Florida Administrative Code* (SCTLs) are arsenic, alpha-BHC, beta-BHC, chlordane, 4,4'-DDE, 4,4'-DDT, and heptachlor epoxide. Contaminants in groundwater that exceed the 62-777 groundwater cleanup target levels in Chapter 62-777 *Florida Administrative Code* (GCTLs) are arsenic, alpha-BHC, and beta-BHC. Soil contaminants that pose an ecological concern for the SWMU are chromium, total DDT/DDE/DDD, lead, total phthalates, vanadium, and zinc. A LUC will be required for the SWMU unless a remedy is implemented that achieves unrestricted use.

The future use of the SWMU is to remain industrial. The contaminants in soil that exceeded the industrial SCTLs include arsenic, alpha-BHC, gamma-BHC, chlordane, 4,4'-DDE, 4,4'-DDT, and heptachlor epoxide. The

contaminants in groundwater that exceeded the GCTLs include alpha-BHC, beta-BHC, and arsenic. Ecological contaminants include chromium, DDT/DDE/DDD, lead, total phthalates, vanadium, and zinc.

Impacted soil thickness ranged from 1 to 2 feet. The areal extent of soil contamination was estimated to be 300 x 175 feet with an estimated volume of 3,760 cubic yards of contaminated surface soil (Figure 3).

The estimated volume of groundwater contamination (Figure 4) is approximately 460,000 gallons of arsenic and pesticide-contaminated groundwater

SUMMARY OF ALTERNATIVES

An evaluation of the corrective measure alternatives for SWMU 15 was conducted in accordance with the EPA Final RCRA Corrective Action Plan Guidance as follows:

Soil Alternatives

Soil Alternative 1: No Action. The No Action alternative serves as a baseline consideration or addresses sites that do not require remediation. The No Action alternative includes costs for conducting 5-year reviews over a 30-year period.

Soil Alternative 2: LUCs and Site Monitoring. This alternative implements LUCs in the form of a residential use prohibition, a soil disturbance prohibition, and to ensure that the cap remains in place. Once implemented, site monitoring will take place to ensure that the implemented LUCs are being maintained.

The implemented LUCs will serve to protect human health and the environment by precluding residential and ecological exposure to contamination and prevent contaminant migration to other areas of the base. LUC implementation will occur via preparation of a site-specific LUCIP that will describe the site location, the prohibition itself, its objectives, and other pertinent information. Once implemented, LUC oversight will be administered under the LUC Memorandum of Agreement¹ (MOA) executed between FDEP, EPA, and NAVSTA Mayport. The LUC MOA provides for certain periodic site inspection and reporting requirements.

¹By separate MOA, effective August 31, 1998, with the EPA and FDEP, the Navy agreed to implement Facility-wide, certain periodic site inspection, condition certification, and agency notification procedures designed to ensure the maintenance by Navy personnel of any site-specific LUCs deemed necessary for future protection of human health and the environment. A fundamental premise underlying execution of that agreement was that through the Navy's substantial good faith compliance with the procedures called for therein, reasonable assurances would be provided to EPA and FDEP as to the permanency of those remedies that included the use of specific LUCs.

Although the terms and conditions of the MOA are not specifically incorporated or made enforceable therein by reference, it is understood and agreed by the Navy, EPA, and FDEP that the contemplated permanence of the corrective measures reflected therein shall be dependent upon the Navy's substantial good faith compliance with the specific LUC maintenance commitments reflected therein. Should such compliance not occur or should the MOA be terminated, it is understood that the protectiveness of the corrective measure concurred may be reconsidered and that additional measures may need to be taken to adequately ensure necessary future protection of human health and the environment.

Figure 3. SWMU 15 - Soil Contamination Area

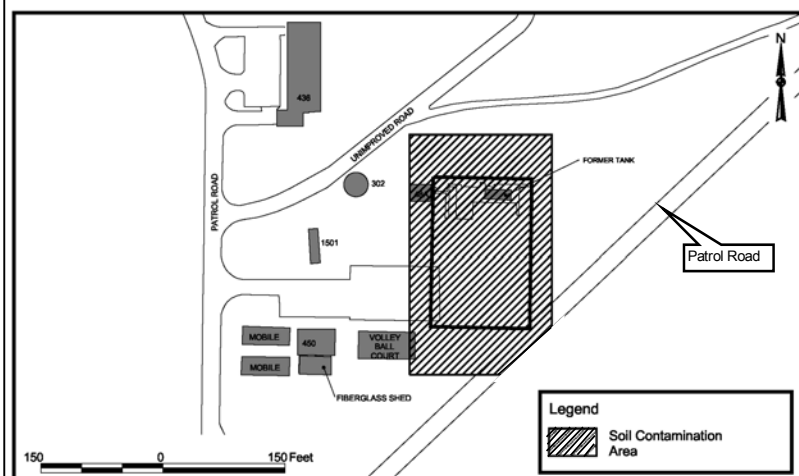
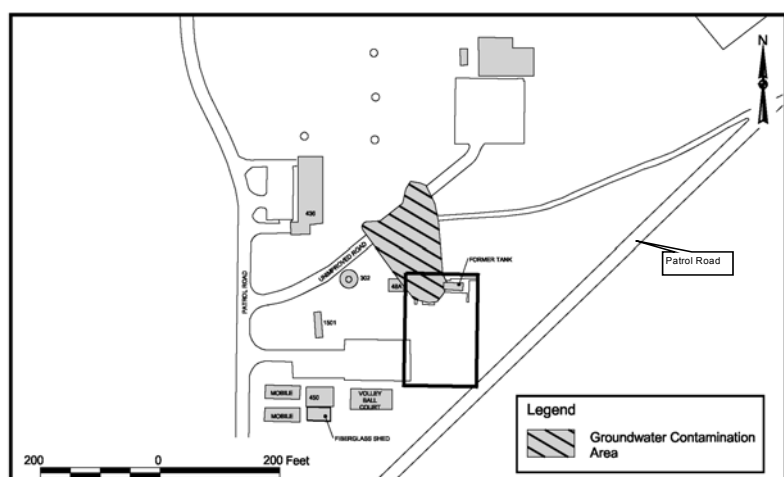


Figure 4. SWMU 15 - Groundwater Plume Area



Soil Alternative 3: Capping, LUCs, and Site Monitoring. This alternative would address the principal threats posed by contaminated soil through the installation of an impermeable cap/cover that would protect humans and ecological receptors from direct contact and would prevent infiltration (which would reduce the potential of contaminants to leach into the underlying aquifer). LUCs and monitoring would be identical to those discussed under Soil Alternative 2.

Capping would involve covering an area of 300 feet by 175 feet with a water-resisting and impermeable layer of asphalt. Currently about 25 percent of the site is paved as part of the construction of a roadway next to the site. This alternative involves paving the rest of the area that could be used as a parking area.

Soil Alternative 4: Surface Soil Removal; Offsite Treatment, Storage, and Disposal Facility (TSDF) Disposal; LUCs; and Site Monitoring. This alternative would minimize long-term management by addressing contaminated soil through excavation and disposal. LUCs and monitoring would be identical to those discussed under Soil Alternative 2. This alternative would offer

aggressive remediation through excavation and transportation of contaminated soil to an appropriate landfill. An estimated 3,760 cubic yards of soil would be excavated for disposal.

The top 2 feet of soil will be excavated, loaded onto trucks and hauled offsite to an approved disposal facility.

Groundwater Alternatives

Groundwater Alternative 1: No Action. The No Action alternative serves as a baseline consideration or addresses sites that do not require remediation. The No Action alternative includes costs for conducting 5-year reviews over a 30-year period.

Groundwater Alternative 2: MNA, LUCs, and Site Monitoring. This alternative contemplates the imposition of LUCs in the form of a groundwater use prohibition. Once implemented, site monitoring will take place to assess natural attenuation and contaminant migration and to ensure that the implemented LUCs are being maintained.

Groundwater Alternative 3: In Situ Treatment, LUCs, and Site Monitoring. This alternative would address the contaminated water through in situ treatment using a Permeable Reactive Barrier (PRB). LUCs and monitoring would be identical to those discussed under Groundwater Alternative 2.

PRB technology is where a material is placed in the subsurface, contaminated groundwater flows through it and treated water comes out of the other side. A treatability study would be required to determine the most effective media. Once the system is installed, very little maintenance is required.

Groundwater Alternative 4: Groundwater Extraction, Ex Situ Treatment, Surface Discharge, LUCs, and Site Monitoring. This alternative would eliminate long-term management by addressing contaminated groundwater through extraction and treatment. LUCs and monitoring would be identical to those discussed under Groundwater Alternative 2. This alternative would offer aggressive remediation through removal/treatment of contaminants. Figure 4 shows the areal extent of the contaminated groundwater. An estimated 2.4 million gallons of groundwater would be extracted, passed through a liquid-phase treatment system, and discharged under a National Pollutant Discharge Elimination System discharge permit.

EVALUATION OF THE PROPOSED REMEDIES AND ALTERNATIVES

The identified corrective measure alternatives were evaluated using the criteria contained in the Final RCRA Corrective Action Plan (EPA, May 31, 1994. OSWER Directive 9902.3-2A). Four criteria and five other factors

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NAVSTA Mayport, Florida

were used to evaluate this and the other corrective measure alternatives. These criteria and factors are

Criteria

- Protect Human Health and the Environment
- Attain Media Cleanup Standards
- Source Control
- Waste Management Standards

Other Factors

- Long-Term Reliability and Effectiveness
- Reduction in Toxicity, Mobility, or Volume
- Short-Term Effectiveness
- Implementability
- Cost

Tables 1 and 2 summarize the evaluation of the corrective measure alternatives as performed in the CMS Report.

RECOMMENDATIONS

Based on the screening of technologies and assessment of various alternatives performed, Soil Alternative 3 is recommended for addressing the soil contamination and Groundwater Alternative 2 is recommended for addressing the groundwater contamination (Figure 5).

The preferred soil alternative involves placing an asphalt cap/cover on the SWMU to provide a barrier and prevent leaching. LUCs would be implemented in the form of a residential use and a soil/cap disturbance prohibition. Site monitoring would be used to ensure that the LUCs are being maintained.

The preferred groundwater alternative involves MNA, LUCs, and site monitoring to address groundwater contamination at the SWMU. Groundwater Alternative 2 relies on natural processes whose progress would be monitored by the periodic sampling. The contaminants would be monitored across the site as well as in downgradient wells as part of the monitoring program. LUCs would prohibit the use of groundwater for drinking purposes.

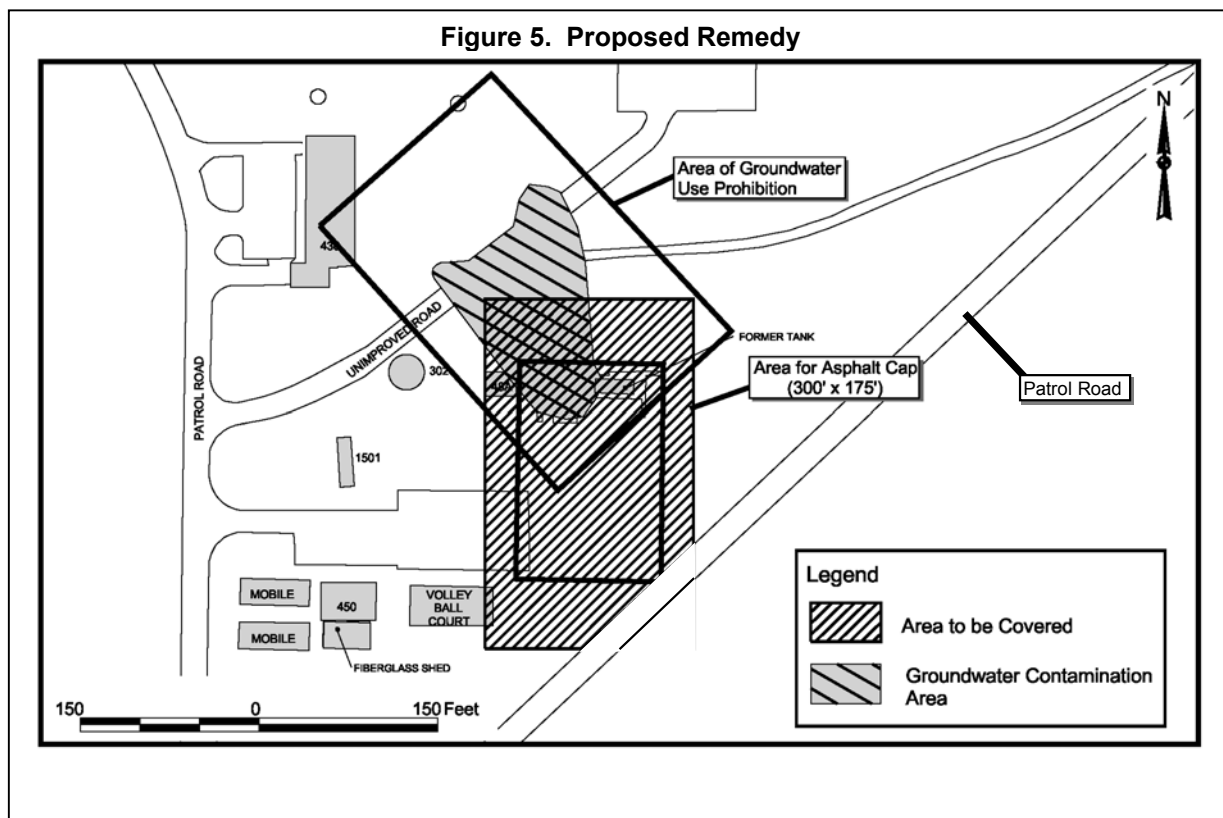


TABLE 1. EVALUATION OF SOIL CORRECTIVE MEASURE ALTERNATIVES FOR SWMU 15

Soil Alternative 1: No Action	Soil Alternative 2: LUCs and Site Monitoring	Soil Alternative 3: Capping, LUCs, and Site Monitoring	Soil Alternative 4: Surface Soil Removal, Offsite TSDF Disposal, LUCs, and Site Monitoring
Protect Human Health and the Environment			
Would not be protective of potential future workers.	Soil contaminants would continue to leach to the groundwater.	Would prevent human or ecological contact and prevent leaching.	All contaminants would be eliminated through removal.
Attain Media Cleanup Standards			
Natural processes would reduce contaminants but would not be monitored.	Natural processes would reduce contaminants to acceptable levels over a long period of time.	Would minimize the risk of direct exposure and the leaching to groundwater.	Removal would attain cleanup levels.
Source Control			
No new source control would be implemented.	Natural processes would not provide source control.	A cap would control the source of contamination from further leaching.	Removal would eliminate the source of contamination.
Waste Management Standards			
No standards applicable as no waste would be generated.	No standards for management of wastes would apply.	Waste would be properly disposed of in accordance with applicable State, Federal, and local regulations.	Waste would be properly disposed of in accordance with applicable State, Federal, and local regulations.
Long-Term Reliability and Effectiveness			
Residual contamination and existing risks would remain.	Contaminants would continue to leach to the groundwater.	A cap would provide long-term reliability and effectiveness.	The degree of long-term reliability and effectiveness would be high.
Reduction in Toxicity, Mobility, or Volume through Treatment			
Reduction of toxicity would occur through natural processes but would not be monitored.	Reduction of toxicity would occur through natural processes over a long period of time.	A cap would reduce mobility.	Mobility of all contaminants would be reduced through removal.
Short-Term Effectiveness			
No short-term risks.	No short-term risks.	Short-term risk would be controllable.	Short-term risk would be controllable but dust would be of concern during construction.
Implementability			
Readily implementable since no action would occur.	Would be readily implementable.	Would be readily implementable.	Would be implementable.
Cost (Total Present Worth)			
\$18,000	\$83,000	\$316,000	\$1,513,000

Shading indicates Proposed Alternative.

TABLE 2. EVALUATION OF GROUNDWATER CORRECTIVE MEASURE ALTERNATIVES FOR SWMU 15

Groundwater Alternative 1: No Action	Groundwater Alternative 2: MNA, LUCs, and Site Monitoring	Groundwater Alternative 3: In Situ Treatment, LUCs, and Site Monitoring	Groundwater Alternative 4: Extraction, Ex Situ Treatment, Surface Discharge, LUCs, and Site Monitoring
Protect Human Health and the Environment			
Not protective	Would be protective	Would be protective	Would be protective
Attain Media Cleanup Standards			
Would not attain.	Natural processes would attain standards after the soil source area is controlled.	Treatment using in situ PRB would attain standards.	Groundwater extraction would attain standards.
Source Control			
No new source control would be implemented.	No new source control would be implemented.	In situ PRB would eliminate the groundwater contamination.	Groundwater collection and treatment would eliminate the groundwater contamination.
Waste Management Standards			
No standards applicable.	Sampling water would be disposed of in accordance with applicable State, Federal, and local regulations.	Sample water would be disposed of in accordance with applicable State, Federal, and local regulations.	Groundwater would be disposed of in accordance with applicable State, Federal, and local regulations.
Long-Term Reliability and Effectiveness			
Contamination and existing risks would remain.	Natural processes would offer long-term reliability and effectiveness.	In situ PRB would provide long-term effectiveness and reliability.	Would provide long-term reliability and effectiveness.
Reduction in Toxicity, Mobility, or Volume through Treatment			
No reduction.	Natural processes would reduce toxicity.	Treatment using in situ PRB would reduce toxicity, mobility, and volume.	Treatment would reduce toxicity, mobility, and volume.
Short-Term Effectiveness			
Would not pose new risk.	Short-term risks would be low.	Short-term risks would be low.	Short-term risks would be average.
Implementability			
Would be readily implementable.	Would be readily implementable.	Would be readily implementable.	Would be implementable.
Cost (Total Present Worth)			
\$18,000	\$361,000	\$487,000	\$493,000

Shading indicates Proposed Alternative.

ACRONYMS AND ABBREVIATIONS

62-777	Chapter 62-777 Florida Administrative Code	MNA	Monitored Natural Attenuation
CFR	Code of Federal Regulations	MOA	Memorandum of Agreement
CMS	Corrective Measures Study	NAVSTA	Naval Station
EPA	U.S. Environmental Protection Agency	OSWER	Office of Solid Waste and Emergency Response
F.A.C.	Florida Administrative Code	PRB	Permeable Reactive Barrier
FDEP	Florida Department of Environmental Protection	RCRA	Resource Conservation and Recovery Act
HSWA	Hazardous and Solid Waste Amendments	RFI	RCRA Facility Investigation
LUC	Land Use Control	SWMU	Solid Waste Management Unit
LUCIP	Land Use Control Implementation Plan	TSDF	Treatment Storage and Disposal Facility

GLOSSARY

Aquifer: An underground layer of rock, sand, or gravel capable of storing and transmitting water within cracks and pore spaces, or between grains.

Corrective Measure: The actual construction or cleanup phase following the selection of cleanup alternatives.

Corrective Measure Design: The cleanup phase where engineers design technical specifications for cleanup remedies.

Corrective Measures Study (CMS): An engineering analysis and report identifying and evaluating the most appropriate technical approaches for addressing contamination at a site.

Environmental Protection Agency (EPA): EPA is the Federal agency responsible for implementing environmental laws enacted by Congress.

Florida Department of Environmental Protection (FDEP): State FDEP offices or their counterparts implement State or Federal environmental laws.

Groundwater: Water found within an aquifer.

Hazardous and Solid Waste Amendments (HSWA): Amendments to RCRA, passed in 1984, which greatly expand the nature and complexity of activities covered under RCRA. They include the Federal Underground Storage Program.

Human Health Baseline Risk Assessment: Study to determine the likelihood that a given exposure or series of exposures may have damaged or will damage the health of individuals.

Information Repository: A public file containing technical reports, reference documents, and other materials relevant to the site cleanup.

Interim Measure: An action taken to address a release or potential release of hazardous substances posing immediate danger to human health or the environment.

In Situ: In its natural or original position or place; in position.

Land Use Control (LUC): Is broadly interpreted to mean any restriction or control arising from the need to protect human health and the environment, that limits use of and/or exposure to any portion of that property, including water resources. This term encompasses institutional controls, such as those involving real estate interests, governmental permitting, zoning, public advisories, deed notices, and other legal restrictions. The term may also include restrictions on access, whether achieved by means of engineered barriers such as a fence or concrete pad, or by human means, such as the presence of security guards. Additionally, the term may involve both affirmative measures to achieve the desired restriction (e.g., night lighting of an area) and prohibitive directives (no drilling of drinking water wells).

LUC Implementation Plan (LUCIP): A written plan, normally developed after a decision document has required one or more LUCs, for some particular area (operable unit, contaminated unit, and/or solid waste management unit). The LUCIP (1) identifies each LUC objective for that area (e.g., to restrict public access to the area for recreational use) and (2) specifies those actions required to achieve each identified objective (e.g., install/maintain a fence, post warning signs, record notice in deed records). LUCIPs specify what must be done to impose and maintain the required LUCs and are therefore analogous to design and/or operation and maintenance plans developed for active remedies.

Monitored Natural Attenuation (MNA): Assessment of the natural processes that clean up or attenuate pollution in groundwater.

Permit: A RCRA permit, issued for Mayport, establishes the facility's operating conditions for managing hazardous waste.

Public Comment Period: A legally required opportunity for the community to provide written and oral comments on a proposed environmental action at a hazardous waste site.

RCRA Facility Investigation (RFI): Evaluates the nature and extent of the releases of hazardous waste.

Resource Conservation and Recovery Act (RCRA) of 1976: Requires each hazardous waste treatment, storage, and disposal facility to manage hazardous waste in accordance with a permit issued by the EPA or a State agency that has a hazardous waste program approved by the EPA.

Response to Comments: A document summarizing the public comments received and the responses to the comments.

Risk Assessment: A study estimating the potential risk from a site to human health and the environment.

Solid Waste Management Unit (SWMU): Any discernable unit (to include regulated units) at which RCRA solid waste has been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste.

Statement of Basis: A public participation document detailing the preferred response action at a site.

[illegible][illegible]

☐ Yes ☐ No

[illegible]

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**Comments on Statement of Basis for the
Old Pesticide Handling Area (SWMU 15)**

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